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DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL, DS, GS, AND DEPOT MAINTENANCE MANUAL

WATTMETERS AN/URM-98 AND AN/URM-98A (NSN 6625-00-566-4990)

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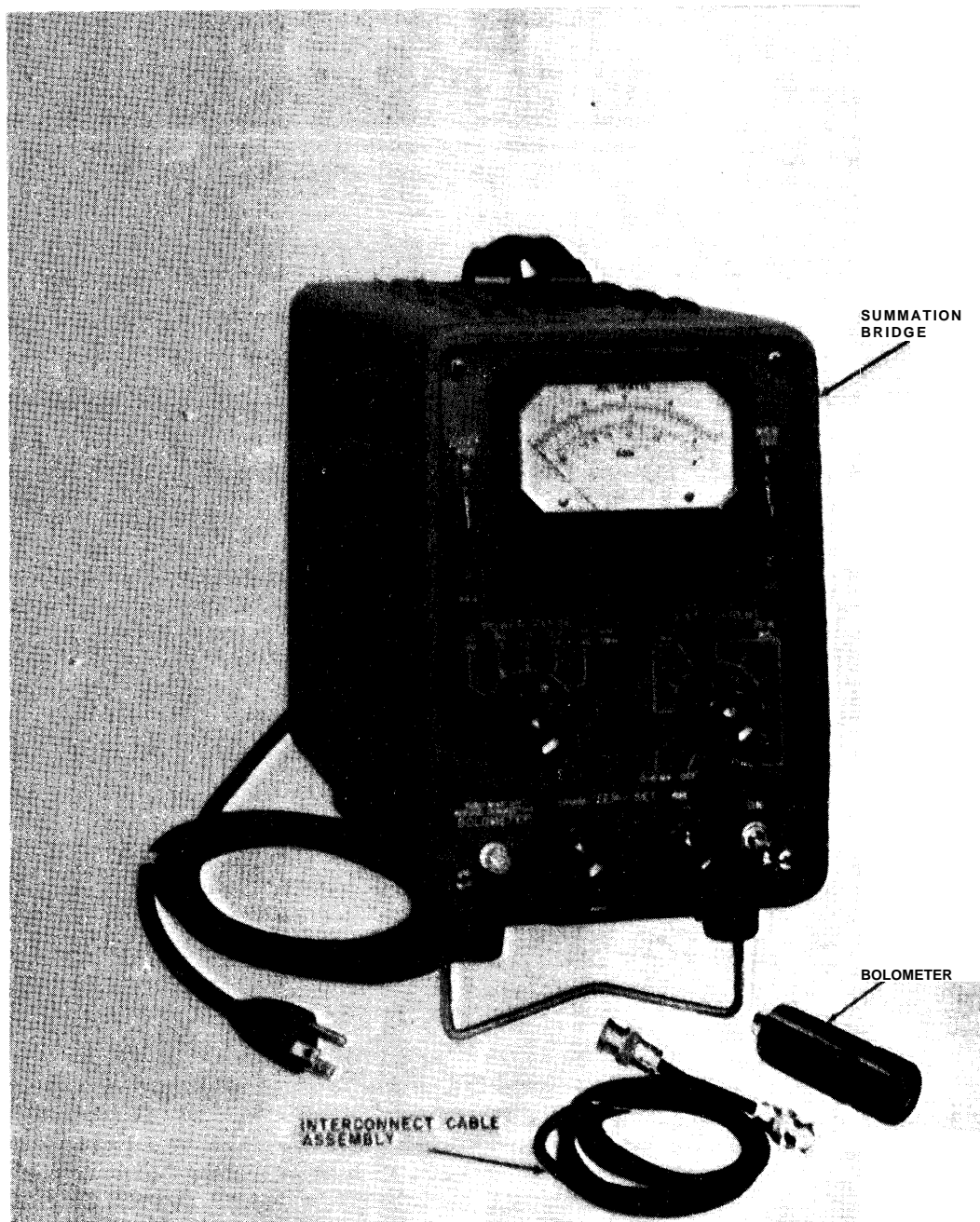
HEADQUARTERS
 DEPARTMENT OF THE ARMY
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**ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT
 AND DEPOT MAINTENANCE MANUAL**

**WATTMETERS AN/URM-98
 AND AN/URM-98A
 (NSN 6625-00-566-4990)**

	Paragraph	Page
CHAPTER 1. INTRODUCTION		
Section I. General	1-1 — 1-3.2	1-1
II. Description and data	1-4 — 1-8	1-1, 1-2
CHAPTER 2. INSTALLATION		
Section I. Service Upon Receipt of Wattmeter AN/URM-98(*)	2-1, 2-2	2-1
II. Installation of Wattmeter AN/URM-98(*)	2-3 — 2-7	2-3, 2-4
CHAPTER 3. OPERATING INSTRUCTIONS		
Section I. Operator's controls and indicators.	3-1, 3-2	3-1
II. Operation	3-3 — 3-5	3-4 — 3-6
CHAPTER 4. OPERATOR AND ORGANIZATIONAL MAINTENANCE	4-1 — 4-11	4-1 — 4-5
5. FUNCTIONING OF EQUIPMENT	5-1 — 5-4	5-1 — 5-10
6. TROUBLESHOOTING	6-1 — 6-6	6-1 — 6-4
7. GENERAL SUPPORT MA MAINTENANCE INSTRUCTIONS		
Section I. Repairs	7-1 — 7.5	7-1 — 7.5
II. Alignment	7-6, 7.7	7-7
CHAPTER 8. GENERAL SUPPORT TESTING PROCEDURES	8-1 — 8-7	8-1 8-8
9. DEPOT MAINTENANCE INSTRUCTIONS	9-1, 9-2	9-1, 9-2
10. DEPOT OVERHAUL STANDARDS	10-1 — 10-8	10-1 — 10-4
11. SHIPMENT, LIMITED STORAGE, AND [DEMOLITION TO PREVENT ENEMY USE		
Section I. Shipment and limited storage.	11-1, 11-2	11-1
II. Demolition of materiel to prevent enemy use	11-3, 11-4	11-1
APPENDIX A. References,		A-1
B. BASIC ISSUE ITEMS LIST (BIIL) AND ITEMS TROOP INSTALLED OR AUTHORIZEE LIST (ITIAL) (Not applicable)		
C. MAINTENANCE ALLOCATION		
Section I. Introduction		C-1
II. Maintenance allocation chart for AN/URM-98 and AN/URM-98A.		C-3
III. Tool and test equipment requirements for AN/URM-98 and AN/URM-98A		C-4
IV. Remarks		C-5
APPENDIX D. Deleted		
INDEX		I-1

*This manual supersedes TM 11-5124. 20 November 1956. Including all changes; TM 11-6625-433-20P, 26 April 1965; and TM 11-6625-433-45P. 29 July 1965.



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Figure 1-1. Wattmeter AN/URM-98.

CHAPTER 1 INTRODUCTION

Section 1. GENERAL

1-1. Scope

a. This manual contains instructions for the operator, organizational, general support, and maintenance of Wattmeters AN/URM-98 and AN/URM-98A. Also included is a discussion of the functioning of the wattmeters.

b. Official nomenclature followed by (*) is used to indicate all models of an equipment or item. Thus, Wattmeter AN/URM-98(*) indicates Wattmeters AN/URM-98 and AN/URM-98A. Test Set, Radio Frequency Power TS-779(*)/U indicates Test Sets, Radio Frequency Power TS-779/U, TS-779A/U, and TS-779B/U. Bolometer, Radio Frequency MX-2144(*)/U indicates Waveguide Probe MX-2144/U, Bolometer, Radio Frequency MX-2144A/U, Bolometer, R.F. MX-2144B/U, and Bolometer, R.F. MX-2144C/U. Cord CG-409(*)/U indicates Cords CG-409E/U and CG-409G/U.

1-2. Indexes of Publications

a. *DA Pam 310-4*. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. *DA Pam 310-7*. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-3. Forms and Records

a. *Reports of Maintenance and Unsatisfactory Equipment*. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. *Report of Packaging and Handling Deficiencies*. Fill out and forward DD Form 6 (Packaging and Handling Deficiencies). Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DLAR 4145.8.

c. *Discrepancy in Shipment Report (DISREP) (SF 361)*. Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

1-3.1. Reporting of Errors

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms), and forwarded direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

1-3.2. Reporting Equipment Improvement Recommendations (EIR)

EIR's will be prepared using Standard Form 368, Quality Deficiency Report. Instructions for preparing EIR's are provided in TM 38-750, the Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications and Electronics Materiel Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

Wattmeter AN/URM-98(*) is a portable test set that consists of Test Set, Radio Frequency Power TS-779(*)/U, Bolometer, Radio Frequency MX-2144(*)/U, and Cord CG-409(*)/U. It is used to measure radio-frequency (rf) power either in milliwatts (row) from 0.001 to 10 milliwatt or in decibels referred to 1 milliwatt (dbm) from -20 to +10 dbm. It may be used at any frequency for which a bolometer exists and it measures either continuous or pulsed power with the thermistor or barretter-type bolometers.

1-5. Tabulated Data

a. *Test Set, Radio Frequency Power TS-779(*)/U*.
 Frequency range Depends on the associated bolometer used. May be used with bolometers which have either 100 or 200 ohms operating resistance and either positive or negative temperature coefficients.
 Power range Full-scale readings of 0.1, 0.3, 1, 3, and 10 mw. Also calibrated in dbm to give continuous